



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,596	02/20/2002	Serge Willenegger	020267	9632
23696	7590	02/24/2005	EXAMINER	
Qualcomm Incorporated Patents Department 5775 Morehouse Drive San Diego, CA 92121-1714			SOBUTKA, PHILIP	
			ART UNIT	PAPER NUMBER
			2684	

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/081,596

Applicant(s)

WILLENEGGER, SERGE

Examiner

Philip J. Sobutka

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-4 and 7-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-4 and 7-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION***Claim Rejections - 35 USC § 103***

1. Claims 2 and 7 – 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (Wang, World International Publication Number WO 01/18987) in view of Meier et al. (Meier, US Patent Application No. 2002/0172168).

Regarding claims 7 and 8, Wang teaches of in a wireless communication system, a method and apparatus comprising: determining a transmission configuration for a first channel as a function of Peak to-Average Ratio (PAR) on the first channel, the transmission configuration including a spreading code and a modulation path (starting page 5, line 30 and ending page 6, lines 10; page 6, lines 14 – 21); if the spreading code is used by another channel in the wireless communication system (page 6, lines 14 – 32; page 7, lines 10 – 32 and page 4, lines 6 – 17), and applying the configuration to the first channel (starting page 5, line 30 and ending page 6, lines 10). Wang does not specifically teach of determining the next best optimum transmission configuration, based on a resultant PAR value; and applying the next best optimum transmission configuration to the first channel (though makes reference to assignment of codes to optimize PAR starting page 14, line 28 and ending page 15, line 4 and makes further reference to optimal codes based on priority starting page 16, line 21 and ending page 17, line 2). In a related art dealing with code allocation in a spread spectrum system, Meier teaches of determining the next best optimum transmission configuration, based on a resultant PAR value (paragraph 0013,

Art Unit: 2684

0019, 0030, and 0033); and applying the next best optimum transmission configuration to the first channel (paragraph 0013, 0019, 0030, and 0033). It would have been obvious to one skilled in the art at the time of invention to have included into Wang's intelligent code assignment, Meier's code allocation system, for the purposes of using a code to maintain a peak-to-average power ratio at or below an acceptable level, as taught by Meier.

As to claim 9, Wang teaches of a wireless apparatus, comprising: a first transmission pair selection unit for determining a transmission configuration for a first channel as a function of Peak-to-Average Ratio (PAR) on the first channel, the transmission configuration including a spreading code and a modulation path (starting page 5, line 30 and ending page 6, lines 10; page 6, lines 14 – 21); and a determination unit for determining whether the spreading code is in use on another channel (page 6, lines 14 – 32; page 7, lines 10 – 32 and page 4, lines 6 – 17). Wang does not specifically teach of a second transmission pair selection unit for determining the next best optimum transmission configuration, based on a resultant PAR value, if the spreading code is used by another channel in the wireless communication system (though makes reference to assignment of codes to optimize PAR starting page 14, line 28 and ending page 15, line 4 and makes further reference to optimal codes based on priority starting page 16, line 21 and ending page 17, line 2). In a related art dealing with code allocation in a spread spectrum system, Meier teaches of a second transmission pair selection unit for determining the next best optimum transmission configuration, based on a resultant PAR value, if the spreading code is used by another channel in the

Art Unit: 2684

wireless communication system (paragraph 0013, 0019, 0030, and 0033). It would have been obvious to one skilled in the art at the time of invention to have included into Wang's intelligent code assignment, Meier's code allocation system, for the purposes of using a code to maintain a peak-to-average power ratio at or below an acceptable level, as taught by Meier.

As to claim 2, Wang in view of Meier teach all the claimed limitations as recited in claim 7. Wang further teaches of wherein the modulation path is selected from an In-phase (I) branch and a Quadrature (Q) branch (pages 6, lines 3 – 7; page 7, lines 5 – 9).

2. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang et al. (Wang, World International Publication Number WO 01/18987) and Meier et al. (Meier, US Patent Application No. 2002/0172168) as applied to claim 7 above, and further in view of Choi et al (Choi, US Patent Application No. 2002/0018457).

Regarding claim 3, Wang and Meier teach all the claimed limitations as recited in claim 7. Wang further teaches of on an uplink in the wireless communication system (page 7, lines 22 –28) but not specifically of wherein the first channel is a dedicated physical channel. In a related art dealing with channel allocation in a CDMA system, Choi teaches of wherein the first channel is a dedicated physical channel (paragraph 0027 and 0007 and 0033). It would have obvious to one skilled in the art at the time of invention to have included into Wang and Meier's transmission system, Choi's channel system, for the purposes

Art Unit: 2684

of providing a solution to channel allocation in an OVSF code system (which experience channel allocation problems) as taught by Choi.

As to claim 4, Wang in view of Meier and Choi teach all the claimed limitations as recited in claim 3. Choi further teaches of wherein the wireless communication system includes a plurality of dedicated data channels (paragraph 0027, 0033, and 0127) and at least one dedicated control channels (paragraph 0027, 0033, and 0127).

Response to Arguments

3. Applicant's arguments filed November 15, 2004 have been fully considered but they are not persuasive.

Applicant's assertion that the cited art does not teach transmit configuration, separate I and Q components, modulation path or spreading coder are clearly incorrect and relevant passages have been cited in the rejections. Therefore applicant's argument that a *prima facie* case of obviousness does not exist cannot be considered persuasive.

Conclusion

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J. Sobutka whose telephone number is 703-305-4825, after March 2005 the number will change to (571) 272-7887. The examiner can normally be reached on Monday-Friday 8:30-5:00.

Art Unit: 2684

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Philip Sobutka
(703) 305-4825


NAY MAUNG
SUPERVISORY PATENT EXAMINER

February 21, 2005